

Large Water Heaters and Small Boilers

South Coast Rule 1146.2 is the only rule which applies to this source category. The rule currently covers units with rated heat inputs between 400,000 and 2 million Btu per hour, and, as of the year 2000, will also cover units over the range of 75,000 to 400,000 Btu/hr.

Table I
Identification of Performance Standards
Source Category: Large Water Heaters and Small Boilers
(75,000 Btu/hour up to and including 2 million Btu/hour)

Regulated Component	Pollutant	Rule/Measure/Date							
		South Coast 1146.2, Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers Adopted 1/9/98							
		Performance Standard							
Large Water Heaters and Small Boilers	NOx	30 ppm @ 3% oxygen on a dry basis for units with rated heat input greater than 400,000 Btu/hour up to and including 2 million Btu/hr							
		x 50 ppm @ 3% oxygen on a dry basis for units with rated heat input from 75,000 Btu/hr up to and including 400,000 Btu/hr and manufactured on or after 1/1/2000							
	CO	40 ppm							

Table II
Identification of Performance Standards
Source Category: Large Water Heaters and Small Boilers

Rule/Measure	Rule/Measure				
	South Coast 1146.2				
Exemptions	1. Waste heat recovery boilers that are used to recover heat from the exhaust of combustion turbines 2. Unfired waste heat recovery boilers that are used to recover heat from the exhaust of any combustion equipment 3. Kilns or ovens used for annealing, drying, curing, baking, cooking, calcining, or vitrifying 4. Unfired waste heat recovery heaters that are used to recover heat from the exhaust of any combustion equipment 5. Units used in recreational vehicles 6. Units used in mobile homes 7. Units located at RECLAIM facilities 8. Retrofitting of residential units is not required 9. Retrofitting is not required for units that are demonstrated to use less than 900 million Btu of natural gas during every calendar				

Table II
Identification of Performance Standards
Source Category: Large Water Heaters and Small Boilers

Rule/Measure	Rule/Measure				
	South Coast 1146.2				
	year beginning with: (a) 2001 for units rated greater than 1 million Btu/hr and less than or equal to 2 million Btu/hr, and (b) 2005 for units rated greater than 400,000 Btu/hr and less than or equal to 1 million Btu/hr				

Table II
Identification of Performance Standards
Source Category: Large Water Heaters and Small Boilers

Rule/Measure	Rule/Measure				
	South Coast 1146.2				
Applicability	<p>Natural gas-fired large (commercial) water heaters, small (industrial) boilers and process heaters. The rule applies to units that have a rated heat input starting at 75,000 Btu/hr up to and including 2 million Btu/hr. Beginning 1/1/2000, the provisions of the rule are applicable to manufacturers, distributors, retailers, refurbishers, installers and operators of new units. Beginning 7/1/2002, the provisions of the rule are also applicable to operators of existing units with a rated heat input greater than 400,000 Btu/hr up to and including 2 million Btu/hr and manufactured on or after 1/1/2000.</p>				

Table II
Identification of Performance Standards
Source Category: Large Water Heaters and Small Boilers

Rule/Measure	Rule/Measure				
	South Coast 1146.2				
Comments	<p>SC 1146.2 is the only district rule in this category. The rule includes provisions for a District implementation study in cooperation with the public, industry, and trade associations. District staff will report results of the study to the District Board at least 18 months prior to the implementation date for the following categories: new units (75,000 to 400,000 Btu/hr), retrofit units (400,000 to 1 million Btu/hr), and retrofit units (1 to 2 million Btu/hr). The study will evaluate availability of low NOx burners and boilers, cost differential between standard units and low NOx units, timing of proposed retrofits, and cost-effectiveness and cost impacts on selected industries and small businesses.</p>				